

NOTICE: This document contains references to Varian.  
Please note that Varian, Inc. is now part of Agilent  
Technologies. For more information, go to  
[www.agilent.com/chem](http://www.agilent.com/chem).



Agilent Technologies

## APPLICATION NOTE

Application 1931 - HPLC

### Anti-virals

#### LC/MS Compatible method for separation of Cold/Cough Medicine

Column: Polaris™ 5 $\mu$  C18-A, 50 x 4.6

Part nr.: A2000050X046

Eluent: A: H<sub>2</sub>O + 0.1% TFA

B: MeOH + 0.1% TFA

Gradient: 10 to 95% B in 5 min

Flow: 2.0 ml/min

Detection: UV @ 214nm

Sample:  
1. acetaminophen  
2. pseudoephedrine  
3. chlorpheniramine maleate  
3A. impurity in standards  
4. dextromethorphan  
5. unknown in formulation  
6. unknown in formulation

Composition of Cold Medication (Each 5 ml teaspoonful contains):

acetaminophen, 160 mg, pain reliever

chlorpheniramine maleate, 1 mg, antihistamine

dextromethorphan HBr, 7.5 mg, cough suppressant

pseudoephedrine HCl, 15 mg, nasal decongestant

